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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/687,921 | 10/20/2003 | Yao-Ching Su | 025789-00010 | 8340 |
| 4372 | 7590 | 02/22/2008 | | |
| ARENT FOX LLP 1050 CONNECTICUT AVENUE, N.W. SUITE 400 WASHINGTON, DC 20036 | | | EXAMINER BODDIE, WILLIAM | |
| | | | ART UNIT 2629 | PAPER NUMBER |
| | | | NOTIFICATION DATE 02/22/2008 | DELIVERY MODE ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DCIPDocket@arentfox.com
IPMatters@arentfox.com
Patent_Mail@arentfox.com

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|------------------------------|-------------------------------|---------------------------|--|
| Office Action Summary | Application No. 10/687,921 | Applicant(s) SU ET AL. | |
| | Examiner William L. Boddie | Art Unit 2629 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 10, 12-13 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In an amendment dated, November 7th, 2007 the Applicants amended claims 1, 3, 5, 10, 12 and 16. Currently claims 1, 3-5, 10, 12-13 and 16 are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 3-5, 10, 12-13 and 16 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 4 recites the limitation "said row barrier ribs" in line 2. There is insufficient antecedent basis for this limitation in the claim.
5. Claims 4, 13 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, claims 4 and 13 require that the gap length crosses over one of said row barrier ribs. In claims 1 and 10, gap length has been defined as a measure of the size of the dual scan gap. In short a measurement is incapable of crossing over barrier ribs. It is suggested that gap length be replaced with dual scan gap to read, "and said dual scan gap crosses over one of said row barrier ribs."

Claim 16 states in the last line, "a dual scan gap of a predetermined gap length is formed between a pair of said data electrodes in the column direction, and said dual scan gap under barrier ribs." It is this last phrase, "and said dual scan gap under barrier

Art Unit: 2629

ribs" which is not understood by the Examiner. It appears as though the Applicant might have intended to include a limitation similar to claim 4, but this is not immediately clear.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3-5, 10, 12-13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosaka (US 6,727,869).

With respect to claims 1 and 3, Kosaka discloses, a plasma display panel with barrier ribs (29 and 19 in fig. 8) configured in a closed shape (rectangle in fig. 8) comprising:

a plurality of sub-pixel cells (28'-1 for example in fig. 8) each having a cell area defined by said closed shape barrier ribs (clear from fig. 8);

a plurality of said sub-pixels cells in a delta configuration defining a color pixel (col. 11, lines 5-7);

a plurality of sustain electrodes each space apart in a row direction at a predetermined cell length (X1-3 and Y1-3 in fig. 8);

a plurality of data electrodes (A1, A3 in fig. 8) overlapping a wall of said barrier ribs in a column direction (29 in fig. 8), each of said data electrodes extending under said cell area (clear from fig. 11); wherein

Art Unit: 2629

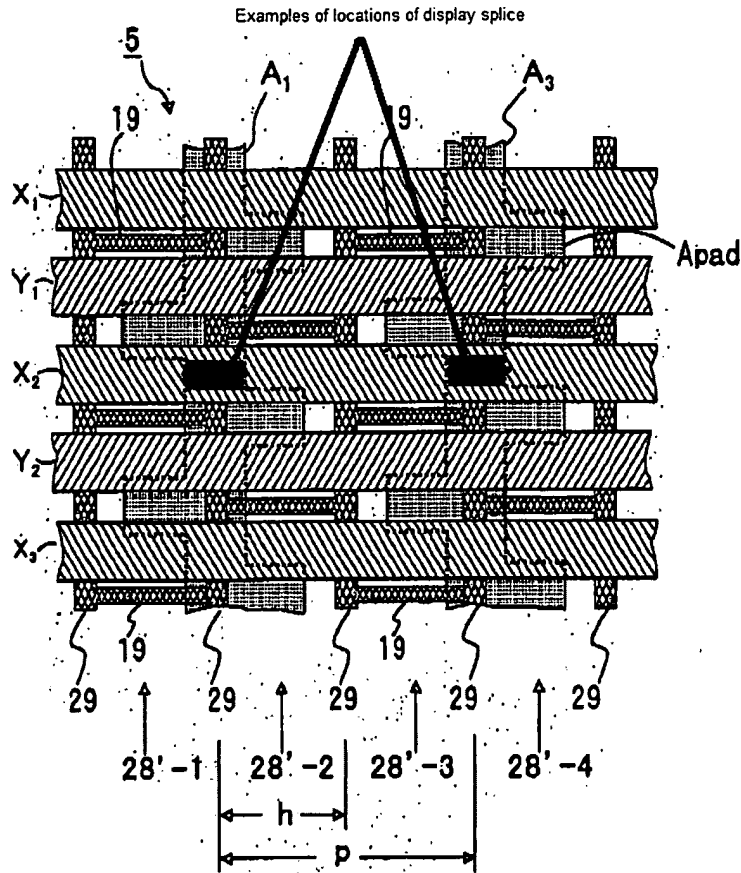
a dual scan gap (clear from fig. 12) of predetermined gap length is formed between a pair of said data electrodes (A1, A3 in fig. 8) in the column direction and at least partially overlapping the barrier ribs in a column direction (clear from fig. 8), and a gap is formed between said barrier ribs and said data electrodes (clear from figs. 8 and 12).

Kosaka does not expressly disclose that the gap is less than 40% of the cell length.

However, based on figure 12 it is clear that Kosaka intended that the alternating protrusions of the data electrodes continue from one half of the panel to the other. With this in mind, we turn to figure 8, where when the data electrodes are split it should be clear that there would be a gap between the row ribs, 19, and the data electrode that is less than 40% of the cell length. See the below annotated figure for further explanation.

Therefore it would have been obvious to one of ordinary skill in the art to make the display splice in a manner to ensure that the gap between a rib and data electrode is minimized to ensure proper discharge of the last pixel that the data electrode is present in. Thus the decision to design the plasma panel so as achieve a gap of less than 40% is seen as an optimum range that would have been obvious to one of ordinary skill in the art at the time of the invention.

FIG. 8



With respect to claim 4, Kosaka discloses, the panel of claim 1 (see above), wherein said gap length is smaller than said cell length (see above) and said gap length crosses over one of said row barrier ribs (clear from figs. 8 and 13).

With respect to claim 5, Kosaka discloses, the panel of claim 1 (see above), wherein said data electrodes have an expanded portion in said cell area (clear from figs. 8 and 11).

With respect to claims 10, 12-13, these claims are seen as merely method versions of the above rejected claims 1 and 3-4 respectively. As such they are rejected on the same merits shown above in the rejection of claims 1 and 3-4.

With respect to claim 16, Kosaka discloses, a plasma display panel with barrier ribs (29 and 19 in fig. 8) configured in a closed shape (rectangle in fig. 8) comprising:

a plurality of sub-pixel cells (28'-1 for example in fig. 8) each having a cell area defined by said closed shape barrier ribs (clear from fig. 8);

a plurality of said sub-pixels cells in a delta configuration defining a color pixel (col. 11, lines 5-7);

a plurality of sustain electrodes each space apart in a row direction at a predetermined cell length (X1-3 and Y1-3 in fig. 8);

a plurality of data electrode pairs overlapping (1, A3 in fig. 8) a wall of said barrier ribs in a column direction (29 in fig. 8),

a dual scan gap (clear from fig. 12) of predetermined gap length is formed between a pair of said data electrodes (A1, A3 in fig. 8) in the column direction and said dual scan gap under barrier ribs (clear from fig. 12).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William L. Boddie whose telephone number is (571) 272-0666. The examiner can normally be reached on Monday through Friday, 7:30 - 4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Art Unit: 2629

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Wlb
2/12/08

A handwritten signature in black ink, appearing to read 'Alexander Eisen', with a stylized flourish at the end.

ALEXANDER EISEN
SUPERVISORY PATENT EXAMINER